INFLUENCE OF CEO OVER CONFIDENCE, GENDER DIVERSITY AND PROFITABILITY ON CORPORATE TAX AVOIDANCE: EMPIRICAL STUDY ON MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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ABSTRACT

This research aims to determine the influence of individual and company characteristics on tax avoidance by examining and analyzing the impact of CEO overconfidence, gender diversity, and profitability on corporate tax avoidance. The rationale of this research is that there is still a lack of research, the authors identify the relationship between CEO overconfidence, gender diversity, and profitability using tax avoidance measurement, i.e., cash effective tax rate (CETR) followed by control variables of sales growth and capital intensity. This study used secondary data with entire manufacturing companies listed on Indonesia Stock Exchange for 2017-2019. The sample was determined using the purposive sampling method and obtained 96 samples. The analysis method used in this research is panel data regression with corporate tax avoidance as the dependent variable and CEO overconfidence, gender diversity, and profitability as independent variables. This research indicates that profitability positively affects corporate tax avoidance, while CEO overconfidence and gender diversity have no significant effect on corporate tax avoidance.

Keywords: CEO Overconfidence, Gender Diversity, Profitability, Corporate Tax Avoidance

INTRODUCTION

Tax is a mandatory contribution to a government entity levied on individuals or companies that meet the criteria as Taxpayers according to the laws of tax. Tax as a source of government revenues significantly contributes to the development of state infrastructure and society. Therefore, governments expect tax revenues to continue increasing every subsequent period. However, based on an article cited from cnbcindonesia.com, tax revenues in Indonesia have never reached the state budget target (Anggaran Pendapatan Belanja Negara, APBN) since 2009. As a result, tax potential has not been optimal (Sembiring, 2021). The government has committed to optimizing tax revenues but has encountered many obstacles. The Taxpayer's interest factor is one of the obstacles affecting the level of achievement of state tax revenues. In Indonesia, taxation divides Taxpayers into two categories, i.e., Individual Taxpayers (Wajib Pajak Orang Pribadi, WPOP) and Corporate Taxpayers (Wajib Pajak Badan, WP Badan). For Corporate Taxpayers, taxes are considered a source of expenses or cost that directly reduces corporate profits. Although taxes are one of the most considerable state revenues, they are contradictory to the expectations of shareholders, where companies need to be capable of generating high profits yet stay on the right track. In prioritizing shareholder interests, the company's management also has its interests: reputation, compensation, or shareholder incentives. Thus, problems arise where
management will try to generate commercial profits that are greater than the company's fiscal profits through tax avoidance practices, causing state revenues not to be optimal.

Pohan (2016) in Marlinda, Titisari, and Masitoh (2020) defines tax avoidance as an effort to avoid tax burden that Taxpayers commit, but legally and safely without going contrary to the tax regulations, by exploiting grey areas in the regulations to minimize the amount of tax payable. According to Puspita and Febrianti (2017), tax avoidance is considered not to violate tax laws and is a legal action as corporations only exploit weaknesses in the laws. Based on a report entitled The State of Tax Justice 2020 reviewed by news.ddtc.co.id, global tax revenues show that every year there are many lost taxes, up to Rp6,052 trillion, due to tax avoidance practices (Wildan, 2020). It has been noted that Indonesia lost taxes amounting to Rp 69.1 trillion annually due to the practices, ranked fourth in Asia after China, India, and Japan, which has the most considerable amount of lost tax due to tax avoidance (Wildan, 2020). Several companies in Indonesia are alleged to be involved in tax avoidance practices, causing state revenues not to run optimally. British American Tobacco (BAT) is one of the companies reported to have committed the practice through PT Bentoel Internasional Investama in Indonesia. Based on a report of Tax Justice Network quoted from nasional.kontan.co.id, PT Bentoel committed tax avoidance with two mechanisms: paying interest on intra-company loans in 2013 and 2015 from Rothmans Far East BV, a Dutch company using funds from other British American Tobacco (BAT) group companies, and paying royalties, IT costs, and expenses that make a fiscal profit of PT Bentoel suffer from even more losses. Consequently, the state loses tax potential up to US$14 million yearly (Dewi & Prima, 2019).

The tax avoidance policy that companies commit can be influenced by some factors, one of which is company characteristics. Previous research conducted by Okroyanti, Utomo, and Nuraina (2017) shows that company characteristics simultaneously influence corporate tax avoidance. Company characteristics are features or identities attached to an entity that differs from one company to the others. The difference in character can be seen from the type of industry, circumstances, and company performance, which can be described through financial ratios like profitability. According to Dayanara, Titisari, and Wijayanti (2020), profitability positively influences tax avoidance. Profitability portrays corporate capability or performance in generating profits. The higher level of profitability of a company shows the company has a good performance in using its assets to generate profits. If a company can generate high profits, the corporate tax burden will also be higher. Hence, this signals that the company can commit tax avoidance to reduce the tax burden it is levied on it. Based on the agency theory, corporate management is motivated to commit tax avoidance to increase the company's profit because when the profits generated are higher, it consequently results in a higher amount of corporate income tax burden, thus increasing the company's tendency to avoid tax (Dewi & Noviari, 2017). In addition, companies that are motivated to commit tax avoidance also aim not to reduce compensation from agent performance (Rahmadani, Muda, Abubakar, 2020). Based on the above explanations, the alternative hypothesis for this research is then formulated as follows:

Ha : Profitability positively influences corporate tax avoidance.

Another factor that influences tax avoidance policy is individual characteristics in a company. Tax avoidance committed by companies can involve corporate leaders as their decision-makers. Intrinsically, individual decisions are the most decisive factor for the existence of a corporate tax avoidance policy. Overconfidence becomes one of the factors of a CEO's personality that can motivate the practice of tax avoidance in companies. Chyz, Gaertner, Kausar, and Watson (2019) reveal that the personality of top executive individuals is indeed impactful in determining corporate policies, as shown
by their research stating that CEO overconfidence has a positive relationship with tax avoidance. Barros and Silveria (2009) in Lestari and Faisal (2019) state that overconfidence is identified as an individual's tendency to exaggerate their knowledge or capabilities. Overconfidence characteristic tends to make CEOs take on policies based on their perspectives, hence becoming one of the internal factors in determining corporate policies. CEO overconfidence can be linked directly with corporate tax avoidance. As mentioned by Hsieh, Wang, and Demirkan (2018), CEO overconfidence has the ambition to bring companies to achieve high revenues that exceed estimation and accumulate more funds for investment and business expansion; thus, CEO overconfidence is motivated to commence tax avoidance activities. In other words, CEO overconfidence encourages companies to conduct tax avoidance activities to reduce the tax burden and cash flows for paying taxes, enabling companies to turn their cash for more beneficial matters, typically investment and business expansion. Based on the agency theory, there is harmony between the interests of corporate management and investors: tax avoidance is regarded as a beneficial action for the management and is aimed at maximizing investors' interests. Sumunar, Jannah, and Aulia (2019) utters that CEO overconfidence is crucial in encouraging tax policies to commit tax avoidance as it corresponds with the company's goals to increase shareholders' wealth by maximizing corporate profits and obtaining incentives from shareholders for their performances. Based on the above descriptions, the alternative hypothesis for this research is formulated as follows:

$H_a : \text{CEO overconfidence positively influences corporate tax avoidance.}$

Researchers now highlight gender differences in the company's board of directors. Some researchers state that risk preference is the primary determinant of corporate policies. Demos and Muid (2020) elucidate that the nature of women inclined towards avoiding risks can affect decisions made by directors to become more tax-abiding. This characteristic of avoiding risks in women can motivate the transparency of financial statements to reduce tax avoidance activities and information asymmetry. Hudha and Utomo (2021), on 117 companies in Indonesia, prove that the diversity of gender influences tax avoidance significantly, where women on boards are considered capable of reducing the level of corporate tax avoidance. Based on the agency theory, Adamz and Ferriera (2009) in Hudha and Utomo (2021) clarify that the presence of women in the leadership of company directors can reduce tax avoidance, an agent's opportunistic behavior, because of women's nature and characteristics that tend to avoid risks and behave more rationally than men. In this way, gender diversity allows for better control and corporate management governance to reduce conflicts between management and investors or shareholders and reduce agency fees due to these conflicts. Based on the above descriptions, the alternative hypothesis for this research is formulated as follows:

$H_a : \text{Gender diversity negatively influences corporate tax avoidance.}$

This research aims to determine the influence of individual and corporate characteristics on tax avoidance by testing and analyzing the influence of CEO overconfidence, gender diversity, and profitability on tax avoidance in the manufacturing companies listed on the Indonesia Stock Exchange from 2017 to 2019. The rationale of this research is that there is still a lack of research that discusses the influence of tax avoidance in terms of individual and corporate characteristics. Unlike previous research, the authors identify the relationship between CEO overconfidence, gender diversity, and profitability using tax avoidance measurement, i.e., cash effective tax rate (CETR) followed by control variables of sales growth and capital intensity. The researchers utilize control variables to increase the accuracy of the influence of independent variables on corporate tax avoidance. The researchers use manufacturing companies as the object of research as they have complex business activities, thus having
plentiful tax activities. Besides, manufacturing companies are the sector giving the most extensive contribution to national economic growth and Indonesia's most significant tax contributor. Therefore, these companies can be expected to represent companies in other sectors.

**RESEARCH METHOD**

The research method utilized is the associative method to predict the existence of a significant relationship between the variables tested, while the type of research used is quantitative. The population in this research is all manufacturing companies listed on the Indonesia Stock Exchange from 2017 to 2019. This research uses secondary data, i.e., audited financial statements and company annual reports, retrieved from the Indonesia Stock Exchange (www.idx.co.id) and the company's official sites. The sampling technique is done with purposive sampling, which consists of several considerations:

1. Manufacturing companies listed on the Indonesia Stock Exchange site consistently from 2017 to 2019, reporting audited financial statements and annual reports.
2. Companies that submitted their financial statements and annual reports in Rupiah.
3. Companies that have data and information that are thoroughly inspected in their financial statements and annual reports.

The method of collecting data utilized is documentation and literature study. Research data is presented in numbers in data tables and diagrams, accompanied by descriptive explanations. The method of data analysis used is a quantitative descriptive analysis using a panel data regression model.

The method of data analysis used in this research is quantitative descriptive analysis. This research uses panel data regression to describe the influence of CEO overconfidence, gender diversity, profitability, and control variables on corporate tax avoidance as the research data is characterized as cross-section and time series. For the regression model used with accuracy in estimation, this research carries out a classical assumption test consisting of a normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. A hypothesis test is then carried out to determine the conclusion, consisting of the F test, T-test, and coefficient of determination test.

A test variable influences a dependent variable (Sugiyono, 2019). The dependent variable in this research is corporate tax avoidance. In this research, the proxy used to calculate the amount of corporate tax avoidance is formulated using a negative cash tax rate by dividing the negative cash tax payment by profit before tax.

An independent variable is a variable that acts as the primary variable that causes the change in the tested variable (Sugiyono, 2019). CEO overconfidence variable is proxied with excess investment (Sumunar, Jannah & Aulia, 2019), which is obtained by regressing asset growth with sales growth, and then is measured back using a dummy variable. The residual value is greater than the median value for one year, indicating the company has excess investment, then it is given a value of 1 (one) and 0 (zero) otherwise. The gender diversity variable is measured by comparing the number of women boards with the total number of boards within a company (Hudha & Utomo, 2021). The profitability variable is calculated using return on asset (ROA), i.e., dividing profit after tax by total assets.

A control variable is a variable that is controlled or made constant so that the influence of test variables on dependent variables is not intervened by external factors that are not examined (Sugiyono, 2019). This research uses sales growth and capital intensity as the control variables. The sales growth
variable is calculated by dividing the difference between sales in the current period and before by the number of sales in the previous period (Honggo & Marlinah, 2019).

Descriptive Statistics Analysis

According to Suliyanto (2018), descriptive statistics is a field that studies the procedures of arranging and presenting data collected in the research. This research utilizes descriptive statistics to provide an overview of the minimum and maximum values, median, mean and standard deviation from variables in the research.

The Classical Assumption Test

The classical assumption test used in this research is aimed to show certainty that a regression equation is correct, unbiased, and consistent. The test in this research consists of a normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test.

A normality test is carried out to examine whether, in a regression model, both the dependent and independent variables have a normal distribution (Ramadhayanti, 2019:147). A good regression model must have normal variable distribution. In this research, the normality test is done with two methods, i.e., graphical analysis and statistical test. The graphical analysis involves Kernel Density graphs, while the statistical test uses the Skewness-Kurtosis method to make the test more objective.

Multicollinearity is a condition in a regression model that finds a perfect or near-perfect correlation between the independent variables (Priyanto, 2018). This test is aimed to determine whether there is a correlation between the test variables (independent variables) of a regression model. A good regression does not have a perfect or near-perfect correlation between the test variables so that the variables in the research are not disturbed, and the research results are not biased. This research uses Tolerance value analysis or Variance Inflation Factor (VIF) in the multicollinearity test. A regression model does not have a multicollinearity problem if the Tolerance value is ≥ 0.10 or equal to the Variance Inflation Factor (VIF) value ≤ 10 (Kusuma, Pambudi, and Suprayitno, 2019).

Autocorrelation is a condition wherein a regression model has a correlation between the residuals in period t and the residuals in the previous period (t-1) (Priyatno, 2018). A good regression model is free from autocorrelation problems. This problem arises because the observation is carried out all the time and are related to one another. The basis for deciding the Wooldridge Test for Autocorrelation in Panel Data is that if the p-value is greater than 0.05, the regression model does not have an autocorrelation problem. Otherwise, if the p-value is lesser than 0.05, the regression model has an autocorrelation problem.

Heteroscedasticity is a condition in which a regression model does not have the same variance from the residuals from one observation to another (Priyatno, 2018), causing the significance test to be invalid. A good regression model does not have heteroscedasticity. In other words, the data used has the same variance. Hence, in this research, a heteroscedasticity test is needed to detect symptoms of heteroscedasticity in the regression model. A regression model does not have a heteroscedasticity problem if the Prob. Chi-Square exceeds 0.05. If a regression model has a heteroscedasticity problem, the model tends to be not efficient. Thus it is necessary to make improvements that can be done with the Robust Standard Error so that the conclusions are correct.

The F test or regression coefficient test is used to detect whether the independent variables have a significant effect on the dependent variable. This research examines CEO overconfidence, gender diversity, profitability, and control variables on corporate tax avoidance with a significance level of 0.05. The decision-making criteria from the F test are as follows:
1. If $F$-value $\leq$ $F$-table, $H_o$ is accepted.
2. If $F$-value $> F$-table, $H_a$ is accepted.

Meanwhile, to determine the influence of CEO overconfidence, gender diversity, profitability, and control variables on corporate tax avoidance through significance value are as follows:

1. If the significance value $> 0.05$, $H_o$ is accepted; neither the independent nor control variables significantly affect corporate tax avoidance.
2. If the significance value is $< 0.05$, $H_a$ is accepted. Either the independent or control variables have a significant effect on corporate tax avoidance.

The T-test or partial regression coefficient test is used to detect the absence of a significant effect of the independent variables and variable control on the dependent variable partially. This research examines CEO overconfidence, gender diversity, profitability, and control variables on corporate tax avoidance with a significance level of 0.05. The decision-making criteria from the F test are as follows:

1. If $T$-value $\leq T$-table, $H_o$ is accepted.
2. If $T$-value $> T$-table, $H_a$ is accepted.

Meanwhile, to determine the influence of CEO overconfidence, gender diversity, profitability, and other control variables on corporate tax avoidance through significance value are as follows:

1. If the significance value $> 0.05$, $H_o$ is accepted; neither the CEO overconfidence, gender diversity, profitability, nor other control variables partially have a significant effect on corporate tax avoidance.
2. If the significance value is $< 0.05$, $H_a$ accepts that CEO overconfidence, gender diversity, profitability, and control variables partially have a significant effect on corporate tax avoidance.

The coefficient of Determination (R2) is the magnitude of the contribution of the test variable to the variable being tested (Wahyuni, 2020). This research uses the adjusted R3 value to test the coefficient of determination. This value ranges from 0 (zero) to 1 (one). The high value of the coefficient of determination or the closer the value of the adjusted R2 value to 1 (one) indicates that the test variable (independent variable) can accurately explain the variations in changes that occur in the tested variable (dependent variable). On the contrary, the low value of the coefficient of determination or the closer the value of the adjusted R2 value to 0 (zero) indicates that the test variable (independent variable) is not able to accurately explain the variations in changes that occur in the tested variable (dependent variable).


## ANALYSIS

### Table 1 Research Sample Selection

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The number of companies in the manufacturing sector listed on the Indonesia Stock Exchange in 2017-2019</td>
<td>166</td>
</tr>
<tr>
<td>2.</td>
<td>Companies that are newly registered (listed) in the research period</td>
<td>(22)</td>
</tr>
<tr>
<td>3.</td>
<td>Companies that experience losses during the research period of 2017-2019</td>
<td>(36)</td>
</tr>
<tr>
<td>4.</td>
<td>Companies that do not present financial statements in Rupiah currency</td>
<td>(29)</td>
</tr>
<tr>
<td>5.</td>
<td>Companies that do not present complete financial statements during 2017-2019</td>
<td>(13)</td>
</tr>
</tbody>
</table>

**Number of Companies that Meet the Sample Criteria** 66

**Number of Companies Having Outlier Data** (34)

**Number of Companies Examined** 32

**Number of Years of Research** 3

**Total Research Samples** 96

*Source: Data Processing Results*

Based on Table 1, a sample of 66 companies is obtained. The result of data processing identifies the existence of outliers of 34 companies, so it has to be subtracted from the number of companies examined to 32 companies, resulting in the observation of the research having 96 samples.

### Table 2 Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Median</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CETF</td>
<td>9</td>
<td>-0.5588105</td>
<td>-0.0334607</td>
<td>-0.2494842</td>
<td>-0.2682684</td>
<td>0.1125408</td>
</tr>
<tr>
<td>Over</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.4687500</td>
<td>0.5016420</td>
</tr>
<tr>
<td>Gender</td>
<td>9</td>
<td>0</td>
<td>0.4000000</td>
<td>0</td>
<td>0.0868261</td>
<td>0.1132846</td>
</tr>
<tr>
<td>ROA</td>
<td>9</td>
<td>0.0106300</td>
<td>0.2937001</td>
<td>0.0752188</td>
<td>0.0907300</td>
<td>0.0662741</td>
</tr>
<tr>
<td>Growth</td>
<td>9</td>
<td>-0.1475926</td>
<td>0.5060275</td>
<td>0.0737956</td>
<td>0.0845363</td>
<td>0.1066484</td>
</tr>
<tr>
<td>CI</td>
<td>9</td>
<td>0.0591995</td>
<td>0.7294980</td>
<td>0.3616649</td>
<td>0.3696644</td>
<td>0.1626336</td>
</tr>
</tbody>
</table>

*Source: Data Processing Results*

Based on Table 2 of the descriptive statistics test results above, the number of objects examined in each variable amounts to 96 samples, following the number of research samples in Table 4.1. The corporate tax avoidance variable with a negative proxy for the cash effective tax rate (CETF) has a
minimum value of -0.5588105 and a maximum value of -0.0334607. The median, mean, and standard deviation resulting from these 96 samples are -0.2494842, -0.2682684, and 0.1125408, respectively.

CEO overconfidence variable proxied with the dummy variable from excess investment gets a minimum value of 0 and a maximum value of 1. The median, mean, and standard deviation resulting from 96 samples are 0, 0.4687500, and 0.5016420, respectively.

The gender diversity variable proxied by comparing the number of women boards with the total of boards gets a minimum value of 0 and a maximum value of 0.4000000. The median, mean, and standard deviation resulting from 96 samples are 0, 0.0868261, and 0.1132846, respectively.

The profitability variable proxied by dividing net profit by total company assets gets a minimum value of 0.0106300 and a maximum value of 0.2937001. The median, mean, and standard deviation resulting from 96 samples are 0.0752188, 0.0907300, and 0.0662741, respectively.

The sales growth variable proxied by dividing the difference between sales in the current period and before gets a minimum value of 0.1475926 and a maximum value of 0.5060275. The median, mean, and standard deviation resulting from 96 samples are 0.0737956, 0.0845363, and 0.1066484, respectively.

The capital intensity variable proxied by dividing total fixed assets by total company assets gets a minimum value of 0.0591995 and a maximum value of 0.7294980. The median, mean, and standard deviation resulting from 96 samples are 0.3616649, 0.3696644, and 0.1626336, respectively.

Table 3. Panel Regression of Corporate Tax Avoidance with CEO Overconfidence, Gender Diversity, Profitability, and Control Variables

| Variable | Coefficient | Robust Std. Err. | t    | P>|t| |
|----------|-------------|------------------|------|-----|
| Over     | -0.0264797  | 0.0222737        | -1.19| 0.244|
| Gender   | 0.2484114   | 0.1796207        | 1.38 | 0.177|
| ROA      | 1.8789810   | 0.5638735        | 3.33 | 0.002|
| Growth   | 0.1951324   | 0.0927953        | 2.10 | 0.044|
| CI       | 0.3434153   | 0.2863189        | 1.20 | 0.239|
| _Cons    | -0.5913488  | 0.1253045        | -4.72| 0.000|

Adjusted R-square 0.2338
F-statistic 4.71
Prob (F-statistic) 0.0026

Source: Data Processing Results
Normality Test

Based on the output of the normality test above, the graph shows a nearly perfect bell shape, thus indicating that the data is normally distributed. Furthermore, to make the test more objective, a statistical test is carried out using the Skewness-Kurtosis method to ensure that the data is normally distributed. The results can be seen in the following table.

Table 4 Skewness-Kurtosis Normality Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Pr (Skewness)</th>
<th>Pr (Kurtosis)</th>
<th>Adj chi2(2)</th>
<th>Prob &gt; chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>r</td>
<td>96</td>
<td>0.1139</td>
<td>0.4406</td>
<td>3.18</td>
<td>0.2037</td>
</tr>
</tbody>
</table>

Based on Table 4, the normality test using the Skewness-Kurtosis method produces a Chi-Square probability value of 0.2037, which means a greater significance value of 0.05. The data is normally distributed. Therefore, the regression model meets the assumption of normality.

Multicollinearity Test

Multicollinearity is a condition in the regression model in which a perfect or near-perfect correlation is found between the independent variables (Priyatno, 2018). The multicollinearity test aims to determine whether there is a correlation between the independent variables of a regression model. In this research, the multicollinearity test can be carried out by looking at the Tolerance (1/VIF) or Variance Inflation Factor (VIF) values. The regression model does not have a multicollinearity problem if the Tolerance value is greater than 0.10 or the Variance Inflation Factor value is less than 10. The results of the multicollinearity test can be seen in Table 5 of the multicollinearity test.
Table 5. Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI</td>
<td>2.89</td>
<td>0.346431</td>
</tr>
<tr>
<td>ROA</td>
<td>2.07</td>
<td>0.483334</td>
</tr>
<tr>
<td>Over</td>
<td>1.89</td>
<td>0.528881</td>
</tr>
<tr>
<td>Growth</td>
<td>1.65</td>
<td>0.606771</td>
</tr>
<tr>
<td>Gender</td>
<td>1.54</td>
<td>0.647763</td>
</tr>
</tbody>
</table>

Source: Research data processed by the authors using Stata 12, 2021

Based on the output of the Multicollinearity Test in Table 5 above, it can be shown that the capital intensity variable (CI) has a Tolerance value of 0.346431 and a VIF value of 2.89. The profitability variable (ROA) has a Tolerance value of 0.483334 and a VIF value of 2.07. The CEO overconfidence variable (Over) has a Tolerance value of 0.528881 and a VIF value of 1.89. The sales growth variable (growth) has a Tolerance value of 0.606771 and a VIF value of 1.65. The gender diversity variable (gender) has a Tolerance value of 0.647763 and a VIF value of 1.54. All the variable has a Tolerance value above 0.10 and the Variance Inflation Factor below 10. Thus it can be concluded that the regression model in this research is free from multicollinearity problems.

Autocorrelation Test

Autocorrelation is a condition wherein a regression model has a correlation between the residuals in period t and the residuals in the previous period (t-1) (Priyatno, 2018). In this research, the autocorrelation test is carried out using Wooldridge Test for Autocorrelation in Panel Data. The basis for deciding the Wooldridge Test for Autocorrelation in Panel Data is that if the F probability value >0.05, the regression model does not have an autocorrelation problem. The results of the autocorrelation test can be seen in the following Table 6 of the Autocorrelation Test.

Table 6. Autocorrelation Test

<table>
<thead>
<tr>
<th>Wooldridge test for autocorrelation in panel data</th>
</tr>
</thead>
<tbody>
<tr>
<td>F (1, 31) = 1.989</td>
</tr>
<tr>
<td>Prob &gt; F = 0.1684</td>
</tr>
</tbody>
</table>

Source: Research data processed by the authors using Stata 12, 2021

Based on the output of the Autocorrelation Test in Table 6, it can be seen that the F probability value is 0.1684, which means it is greater than the value of 0.05. Thus it can be concluded that the regression model is free from autocorrelation problems.

Heteroscedasticity Test

Heteroscedasticity is a condition in which the regression model does not have the same variance from the residuals from one observation to another, which causes the significance test to be invalid. In this research, the heteroscedasticity test is carried out using the Modified Wald test. The regression model does not have a heteroscedasticity problem if the Prob. Chi-Square does not exceed 0.05. The results of the heteroscedasticity test can be seen in the following Table 8 of the Heteroscedasticity Test.
Table 7. Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Modified Wald test for groupwise heteroscedasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob &gt; chi2</td>
</tr>
<tr>
<td>= 0.0000</td>
</tr>
</tbody>
</table>

Source: Research data processed by the authors using Stata 12, 2021

Based on the output of the Heteroscedasticity Test in Table 7, it can be seen that Prob. A Chi-Square of 0.0000 has a value less than 0.05. Thus it can be concluded that the regression model has a heteroscedasticity problem, indicating the variance of the residuals, which is not constant from one observation to another.

Furthermore, to correct the heteroscedasticity problem, improvements were made using the Robust Standard Error model regression so that the conclusions drawn in this study were not biased.

T-Test

1. The CEO overconfidence variable shows a smaller t-value than the t-table value (1.19 < 1.99), indicating that the increase or decrease in CEO overconfidence does not affect the tax avoidance behavior of companies in the manufacturing sector. The cause is that CEOs’ overconfidence in manufacturing companies is still relatively low. Besides, the decision to commit tax avoidance is not limited only to the confidence level of the CEOs. Other factors, such as companies carrying out CSR activities, can affect CEO overconfidence to not commit tax avoidance because of a culture of morality, where companies not only consider shareholders' interests, but also the impacts of their business activities on the economy, society, and the surrounding environment. Therefore, the alternative hypothesis on the CEO overconfidence variable is rejected. This research is in line with Carrer and Slavov (2021) findings.

2. The gender diversity variable shows a smaller t-value than the t-table value (1.38 < 1.99), indicating that the increase or decrease in gender diversity does not affect the behavior of corporate tax avoidance in the manufacturing sector. The cause is that the average gender diversity or the proportion of women on the board of directors is only 8.7%, which means it is still relatively small, so it does not affect the company’s tax avoidance decisions. In addition, tax avoidance behavior committed by men and women can be formed by the presence of reward and incentive systems, not because of gender diversity, thus not influencing the decision to avoid tax in the manufacturing sector and causing the alternative hypothesis on the gender diversity variable to be rejected. This research is in line with the research conducted by Ramadhitra and Geraldina (2020) and Budi (2019).

3. The profitability variable shows a bigger t-value than the t-table value (3.33 > 1.99), indicating that profitability can influence the behavior of corporate tax avoidance in the manufacturing sector. A coefficient value of 1.8789810—a positive value—indicates a positive relationship between profitability and the behavior of corporate tax avoidance. The cause is high profitability implies that the companies' performance in managing their assets is getting better in generating increasing profits. As profits increase, the income tax burden will also be more significant. Hence, companies tend to commit tax avoidance to minimize their tax burden. Therefore, the alternative hypothesis on the profitability variable is accepted. This research is in line with Rahmadani, Muda, and Abubakar (2020) and Sholeha (2019).
4. The control variable of sales growth shows a positive relationship with corporate tax avoidance in the manufacturing sector. The cause is a high level of sales indicating that the companies are experiencing rapid growth and have the opportunity to gain an increase in profits, causing the income tax burden to increase as well, thus making the companies be inclined to commit tax avoidance in order to minimize the corporate tax burden. This research is in line with Pratiwi, Mahaputra, and Sudiartana (2020).

5. The control variable of capital intensity does not have any relationship with corporate tax avoidance in the manufacturing sector. The cause is that the companies that purchase fixed assets are not solely aimed at avoiding taxes with depreciation incurred to reduce taxable income but to carry out the company's operating activities. This research is in line with the research conducted by Masrurroch, Nurlaela, and Fajri (2020) and Dayanara, Titisari, and Wijayanti (2020).

F-Test

F-test, or regression coefficient test, is used to detect a significant influence of the independent variable on the dependent variable. This research examines CEO overconfidence, gender diversity, profitability, and other control variables on corporate tax avoidance with a significance level of 5% or 0.05. Based on Table 3, the resulting F-value, or F-statistic, is 4.71. The F-value is more significant than the F-table value (4.71 > 2.32), rejecting the null hypothesis. Furthermore, the probability value of the F-statistic of 0.0026 also shows a value smaller than the alpha value of 0.05. Therefore, it can be concluded that the independent variables of CEO overconfidence, gender diversity, profitability, and control variables, including sales growth and capital intensity, can simultaneously influence corporate tax avoidance in manufacturing companies.

Coefficient of Determination Test

The coefficient of determination test is carried out to measure the model's ability to explain the variation of a dependent variable by testing the independent variable and other control variables. Based on Table 3, the Adjusted R Square value of the regression model used in this research is 0.2338. This value shows that this research model can explain the variation of its dependent variable by 23.38%. Meanwhile, the remaining 76.62% is explained by other factors outside the variables examined in this research.

CONCLUSIONS

This research is conducted to test the relationship between individual and corporate characters with corporate tax avoidance. This research uses secondary data, i.e., audited financial statements and company annual reports, obtained from the official site of the Indonesia Stock Exchange (www.idx.co.id) and the company's official sites. The population in this research are all manufacturing sector companies listed on the Indonesia Stock Exchange between 2017 and 2019, with 96 observations. The researchers used three independent variables: CEO overconfidence, gender diversity, and profitability; and two control variables: comprising sales growth and capital intensity, as variables tested against corporate tax avoidance, which is proxied by negative cash effective tax rate (CETR), where, as the value of CETR increases, the higher the behavior of corporate tax avoidance.

Based on the data analysis and study results, the writers conclude that CEO overconfidence, gender diversity, and capital intensity do not influence tax avoidance. Whereas profitability and sales growth
positively affect corporate tax avoidance. Based on the data analysis and conclusions, several suggestions can be made for further research and interested parties. Academics in the field of taxation are expected to learn more about the factors influencing corporate tax avoidance from the characteristics of individuals and companies, both internal and external. Next, researchers must modify the research model using moderating or intervening variables. Companies with high profitability and sales growth levels are expected to comply with the regulations in calculating and paying taxes properly by not practicing tax avoidance as a form of responsibility to the community.

REFERENCES


